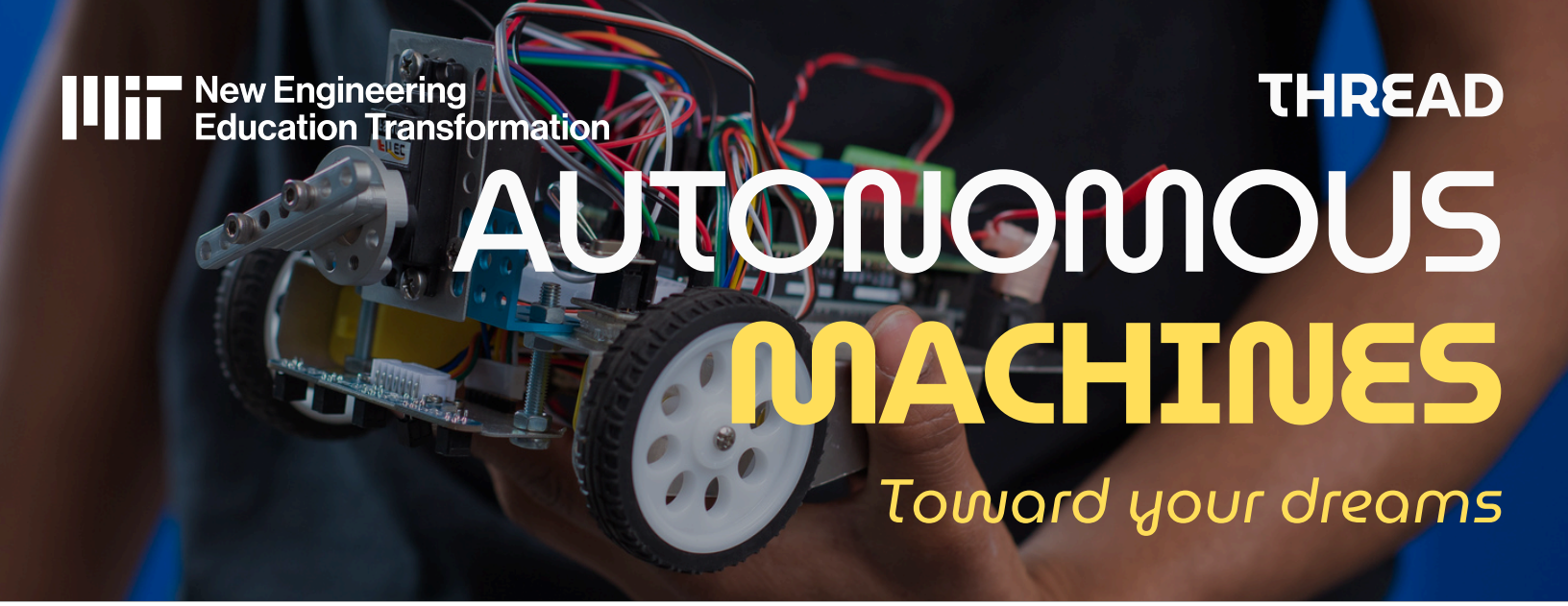

New Engineering Education Transformation

THREAD

AUTONOMOUS MACHINES

Toward your dreams

AUTONOMOUS MACHINES

Do you want to learn how to design, fabricate, program, and control robots, drones, and other cool autonomous machines?

In the **New Engineering Education Transformation (NEET) Autonomous Machines (AM) thread**, you will acquire hands-on experience through a series of projects with escalating complexity.

Sophomore Year:

Individual projects that focus on sensor usage and integration, basic fabrication, and structured programming for robotic applications.

Junior Year:

Drone programming and vision sensing, and a group project that focuses on autonomy navigation algorithms with GPS, LIDAR, and vision sensing.

Senior Year:

A class project working with our industry partners that solves a meaningful real-world problem in autonomous systems and robotics.

AM LEAD INSTRUCTOR

Dr. Gregory Long
AM Lead Instructor, Lecturer
MIT School of Engineering
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LEARN MORE

neet.mit.edu
neet@mit.edu

THREAD **REQUIREMENTS**

Sophomore Year:

- Fall: 16.632A Introduction to Autonomous Machines I (6 units)
- Spring: 16.632B Introduction to Autonomous Machines II (6 units) or 2.S007 Design and Manufacturing I: Autonomous Machines

Junior Year:

Fall: 16.633 NEET Junior Seminar: Autonomous Machines (3 units)

Fall or Spring: Choose one project class from the following:

- 6.4200 (6.141)/16.405 Robotics: Science and Systems
- 2.12 Introduction to Robotics

Senior Year:

- Fall: 16.634 NEET Senior Seminar: Autonomous Machines (3 units)
- Spring: 16.84 Advanced Autonomous Robotic Systems (internship, UROP, or industry experience may be substituted by petition)

Foundation Subjects:

- Mechanics: 2.001, 16.001, or Self-Study Statics/Mechanics (for Course 6 majors only)

Intro to Programming: [6.100A (6.0001) and 6.100B (6.0002)], 2.086, or 6.1010 (6.009)

Controls: 2.004, 6.3100 (6.302), or 16.06

NEET is a 3-year certificate program you opt in to as a sophomore and complete along with your major. Meet and connect with NEET students in the NEET Scholars Collaboration Space (3-001).

AM FOUNDING FACULTY LEAD

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